Doc Code: AP.PRE.REQ

# PRE-APPEAL BRIEF REQUEST FOR REVIEW

| Docket Number (Optional) |
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| *EMC-01-144* |

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]

on _____*APRIL 14, 2006*_____

Signature _____*Joel Wall*_____

Typed or printed name _____*JOEL WALL*_____

| Application Number | Filed |
|---|---|
| *09/965,430* | *09/27/2001* |

| First Named Inventor |
|---|
| *KRISHNAN, SRIRAM* |

| Art Unit | Examiner |
|---|---|
| *2143* | *SHIN, KYUNG H.* |

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
        Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

☒ attorney or agent of record.
Registration number _____*25,648*_____

☐ attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 _____

_____*Joel Wall*_____
Signature
_____*JOEL WALL*_____
Typed or printed name

_____*508-625-1323*_____
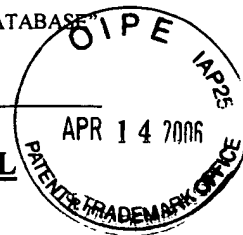Telephone number

_____*April 14, 2006*_____
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☐ *Total of _____ forms are submitted.

## PRE-APPEAL BRIEF REASONS FOR REQUEST OF REVIEW OF FINAL REJECTION DATED DECEMBER 28, 2005

Independent claims 1, 32 and 63 were finally rejected under 35 U.S.C. §102(e) as being

anticipated by Wallach et al. (U.S. Patent No. 6,292,905; hereinafter "Wallach"). These claims

were amended after the final rejection to include only the non-IP address limitations of claims 2,

33 and 64 respectively as well as all limitations of claims 4, 35 and 66 respectively. These

amended claims have been entered for purposes of appeal. The only applied reference which

need be considered with respect to these three amended independent claims is Wallach[1]. The

final Office Action is deficient and should be withdrawn for the following reasons.

## I. WALLACH DOES NOT SELECT *ONE* NODE FROM THE NETWORK'S PLURALITY OF NODES AS AN ALLEGED "MASTER NODE"

Claim 1, for example, recites, *interalia*, "means for selecting **one** of said plurality of

nodes as a master node" (emphasis added). The "plurality of nodes" is in a computer network.

The final Office Action, page 9, applies Wallach, col. 3, lines 46-50 against this limitation, and

equates Wallach's primary server to Applicants' recited one "master node."

> The records/objects in the enhanced database contain for at least 1 [one] clustered resource, a primary and a secondary server affiliation. Initially, all users access a clustered resource through the server identified in the enhanced database as being the primary server for that clustered resource. (Wallach, col. 3, lines 46-50)

A clustered resource is a resource that is backed-up (col. 6, lines 54-56). Wallach provides an

example of a clustered resource in its Figs. 3 & 4, generally discussed in col. 6, line 10 to col. 7,

line 24. Server 56 is primary server for clustered resource RAID 80 and server 54 is its backup

server (col. 6, lines 46-54). However, for a resource other than RAID 80 shown in Fig. 3, these

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[1] Taylor, (U.S. Patent No. 5,664,170) was cited against claims 2, 33 and 64 only for IP addressing. *See* final rejection pages 6-9. And the other cited references do not cure any of the deficiencies of Wallach discussed herein.

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servers can be required to reverse roles, and server 54 shall be primary server and server 56 shall

be backup server with respect to such other resource. See Wallach, col. 10, lines 40-45:

> "Since <u>EACH</u> server performs as a primary with respect to one object and a secondary
> with respect to another object, it is a characteristic of the resident processes that they will
> run alternately in a primary and a backup mode depending on the particular object being
> processed." (Emphasis added).

Therefore, from the viewpoint of only a single cluster with resources, where the required

minimum two servers are configured as mutual primary-secondary pairs, <u>each</u> server is

necessarily a primary server for one of two different resources and the other server is its backup.

In this example, each of servers 54 and 56 is a primary server for a resource, where the resource

served by primary server 54 is different from the RAID 80 resource served by primary server 56.

This example shows two primary servers or **TWO "MASTERS" AT A MINIMUM**. Thus,

even when unreasonably viewing only a single cluster as a "network", Wallach does <u>not</u> disclose

or suggest "means for selecting <u>**one**</u> of said plurality of nodes as a master node" (emphasis

added) as recited in claim 1 because at least two such nodes are always selected. On this basis

alone, the 35 U.S.C. § 102(e) rejection of claim 1 should be withdrawn and the claim allowed.

Moreover, from the network viewpoint, the alleged equivalency between Wallachs'

primary server and Applicants' recited <u>**one**</u> master node is erroneous because <u>more than one</u>

primary server is necessarily disclosed within the network of Wallach, which is <u>admitted</u> on page

5 of the final Office Action: "There is <u>not</u> a single primary and secondary server pair for the

entire network connected distributed database (i.e. DDB). The DDB designates a <u>plurality</u> of

network resources managed by the distributed database management system with a <u>plurality</u> of

primary and secondary server pairs. A server pair for the management of each network

resource." (final Office Action, page 5, emphasis added) Thus, within the Wallace network,

<u>Applicants and the Examiner agree that there is a plurality of primary-secondary server pairs,</u>

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i.e., a plurality of alleged <u>master</u>-secondary server pairs which clearly implies more than one

master per network. The final rejection is deficient in this regard and the 35 U.S.C § 102(e)

rejection of claim 1 should be withdrawn and the claim allowed on this additional basis alone.


## II: WALLACH DOES NOT SUBORDINATE *ALL* OF THE OTHER NODES TO THE ALLEGED "MASTER NODE"

Claim 1, for example, recites, interalia, "means for subordinating **all** other of said

plurality of nodes to said master node in a configuration defined by said master node and said all

other of said plurality of nodes." (Emphasis added.) It is respectfully submitted that the only

other nodes which could possibly be interpreted as being subordinated to a so-called "master"

node in Wallach would be a secondary server which is subordinated to its primary server for that

particular primary-secondary server pair and the clustered resource served by the primary server.

This conclusion is supported by Wallach: "<u>An object which has neither a primary nor backup</u>

<u>relationship with the server running the process will</u> *not* <u>be subject to detection, fail-over or fail-</u>

<u>back processing.</u>" (Wallach, col. 10, lines 51-54; emphasis added) Thus, if not involved in the

primary-secondary server pair, another server in that cluster is <u>not</u> subject to detection, fail-over,

or fail-back with respect to the activity of that primary-secondary pair and therefore cannot be

"subordinated" to that primary server. Although it may be true that, in Wallach, each server is a

subordinated backup server with respect to <u>a</u> primary server, this does not meet Applicants'

claim limitation because <u>each such subordinated backup server is not subordinated to the same,</u>

<u>one, primary server.</u> As the Examiner <u>admitted</u>, there is "A <u>server pair</u> for the management of

<u>each</u> network resource." (Emphasis added.) Therefore, "means for subordinating all other of

said plurality of nodes to said master node in a configuration defined by said master node and

said all other of said plurality of nodes" as recited in claim 1 is not disclosed or suggested by

Wallach, because _all_ nodes are not subordinated to the same primary server in Wallach. The

final office action is deficient in this regard and the 35 U.S.C § 102(e) rejection of claim 1 should

be withdrawn and the claim allowed on this additional basis alone.

### III: WALLACH'S PRIMARY SERVER UPON FAILURE DOES NOT, AND IN FACT CANNOT, RESPOND TO A CHANGE TO DOMAIN CONFIGURATION TO MAINTAIN CONTENTS OF DDB'S IDENTICAL

Claim 1, for example, recites interalia, "said _master node includes means for responding_

_to a change to said domain configuration status_ in a manner to maintain said contents of said

each said DDB identical to said contents of said every other said DDB." (Emphasis added.) The

final Office Action, page 9, applies the following section of Wallach directly against this claim

limitation of Applicant's master node:

> When server resident processes detect a **failure** of the primary server the enhanced
> database is updated to reflect the failure of the primary server, and to change the
> affiliation of the resource from its primary to its backup server. (Wallach, col. 3, lines
> 50-54, emphasis added)

In the above circumstance, Wallach's primary server has failed and it, therefore, is in no position

to do anything, much less respond to a domain configuration change to maintain DDB's

identical. The Examiner is pointing to this failure of Wallach's primary server as being

equivalent to Applicants' recited "change to said domain configuration status" because there

isn't a better domain configuration status change example in Wallach to use. Since Wallach is

specifically and exclusively directed to backup and failover when a primary server fails, there are

no other examples in Wallach which can be alleged as a "change to said domain configuration

status". The updating and remapping is accomplished by "server resident processes."

> The **updating and remapping is accomplished by server resident processes** which
> detect failure of the primary server, and remap the network resource server
> affiliation. (Wallach, col. 3, lines 54-57, Emphasis added.)

This means that the remapping is accomplished by _other_ software (i.e., "processes") resident on a server that hasn't failed, i.e., software other than Wallach's primary server or primary server software. The primary server has failed which causes the backup procedure to be initiated. As noted, since Wallach's primary server has failed it cannot accomplish anything, much less accomplish updating and remapping. Wallach's primary server is dead, at least momentarily.

But, Applicants' master node in claim 1 is very much alive and _includes_ responding means, included within the master, to respond to a change to domain configuration status in a manner to maintain contents of each DDB identical to contents of all other DDB's. This is radically different from the example to which the Examiner points because Applicants' invention is radically different from Wallach. Applicants' master node maintains identical the contents of an entire network's DDB's and accomodates configuration changes such as adding or deleting nodes, etc. (_See_ Applicants' spec., pgs 31-33 and Figs. 6/7.) Applicants' _master node maintains_ the DDB contents identical across DDB's in the network but, _Wallach's failed primary server does not_ perform this function. Other software, "resident processes", is being used in Wallach to maintain the DDB contents identical, at least within a cluster. Clearly, Applicants' limitation "said master node includes means for responding to a change to said domain configuration status in a manner to maintain said contents of said each said DDB identical to said contents of said every other said DDB" as recited in claim 1 is not disclosed or suggested by Wallach for reasons given above. The final office action is deficient in this regard and the 35 U.S.C § 102(e) rejection of claim 1 should be withdrawn and the claim allowed on this additional basis alone.

Independent claims 32 and 63 contain equivalent limitations to the three limitations analyzed above. Therefore the 35 U.S.C § 102(e) rejection of these claims should likewise be withdrawn and the claims allowed for the reasons given above. All dependent claims are allowable on the basis of their respective dependencies from allowable base claims.